

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 20-25 have been withdrawn from consideration. Accordingly, claims 1-19 are submitted for reconsideration.

The Examiner is respectfully requested to acknowledge receipt and consideration of the information cited in the August 2, 2002 Information Disclosure Statement.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

In the Office Action, the Examiner made a series of objections to the claim based on grammar, word/phrase uses, and clarity. The following remarks will address these objections in accordance with the order presented in the Office Action.

Regarding the grammatical objections, claim 1 has been amended to add “a” before the word “specified.” Applicant submits that no article is necessary before “deviation” in claim 5 as the phrase “to correct deviation” is quite clear, and the term “deviation” has not previously been introduced in the claim. Like claim 1, claim 8 has been amended to add “a” before the word “specified.”

Regarding the word/phrase objections, the Office Action asserted that the expression “a relative tilt angle” is indefinite because the term “relative” is unclear in its usage in the claim. Applicants respectfully disagree. The “tilt angle,” as explained in the specification, is used when: (1) tilting the specimen holder only; (2) tilting the electron beam only; or (3) tilting both the specimen holder and the electron beam. The expression “relative tilt angle” is used to refer to the angle between the specimen holder and the electron beam, which can be any of the three tilting situations, i.e., tilting of the specimen holder, the electron beam, or both. In other words, a relative tilt angle is the tilt angle of the specimen holder relative to the

tilt angle of the electron beam. Accordingly, Applicants submit that the expression “a relative tilt angle” is clear and definite. Further, “a first relative tilt angle” and “a second relative tilt angle” clearly refer to two different relative tilt angles.

Claim 10 has been amended to recite “a specimen tilting section for tilting said specimen holder relative to an incident electron beam.” Applicant submits that this phrase is clear and definite.

For claim 12, Applicants have deleted “the” before “conditions for measuring,” thus obviating any issue of insufficient antecedent basis.

Finally, regarding the claim clarity objections, the Office Action asserted that claims 1 and 8 were indefinite because they did not clearly describe how the data correcting section corrects the three dimensional data to have a specified relationship. Applicants believe that the Office Action has confused breadth with indefiniteness or lack of clarity. The claim language clearly recites the function performed by the data correcting section, specifically to correct the three dimensional data to have a specified relationship under the condition of a relative tilt angle between said specimen holder and said electron beam. The manner in which the data correcting section performs this function is a question of breadth, not definiteness. For more detail regarding the function, the specification of the present application provides additional explanation of how the data correcting section corrects the data, for example, in paragraphs [0062] to [0067], [0078], and [0087] to [0091]. It is not necessary, however, to recite each of the details disclosed in the specification nor is the correcting function of the data correction section limited to the disclosed details.

For claim 5, the Office Action asserted that the claim is indefinite because it does not clearly describe how the data correcting section uses reference marks to correct deviation. Here, again the Office Action has confused breadth with indefiniteness. Claim 5 merely recites that the reference marks are in fact used to correct the deviation. However, the manner in which the reference marks are used to correct the deviation is a question of breadth, not indefiniteness.

The same issue applies to claim 6, for which the Office Action asserted that claim 6 is indefinite because it is unclear how an image data rectifying means corrects the three dimensional data into rectified data using acquired rectifying parameters. Again, the manner in which the rectifying parameters are used to correct the three dimensional data into rectified data is a question of breadth, not indefiniteness.

Finally, in claims 7 and 9, the Office Action similarly asserted indefiniteness because it is unclear how a stereovision section forms a three-dimensional image of the specimen on the basis of the data corrected with the data correcting section. As explained above for claims 1, 5, 6 and 8, this is an issue of breadth, not indefiniteness. Accordingly, Applicants submit that claims 1, 5, 6, and 8 are clear and definite.

Claims 1-9 were rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. In particular, the Office Action asserted that there was insufficient antecedent basis for “said three-dimensional detection data” in claims 1 and 8. By this Amendment, Applicants have amended claim 1 to recite “a data correcting section for correcting three-dimensional detection data, which is based on the electron beams detected by the electron beam detecting section.” An analogous amendment has been made to claim 8. Applicants submit that these Amendments obviate the rejection of claims 1 and 8, and that claims 1-9 are in conformance with 35 U.S.C. § 112, ¶ 2.

Claims 1-5, 7-10, 12-15, and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kato et al. (U.S. Patent No. 4,039,829). Claim 1, as amended, recites that an electron beam device comprises, *inter alia*, a data correcting section for correcting three-dimensional detection data, which is based on the electron beams detected by the electron beam detecting section, to have a specified relationship under the condition of a relative tilt angle between the specimen holder and the electron beam, wherein the data correcting section comprises: a rectifying parameter acquiring means for acquiring rectifying parameters at relative tilt angles between the specimen holder and the incident electron beam, and lens distortion correcting parameters for correcting the lens distortion of the electron optical system.

Kato et al. discloses that two sample images under different incident angles are obtained and displayed on two Braun tubes respectively observed by the left eye and right eye at the same time to realize a stereoscopic vision (column 4, lines 1-25). Kato et al. further discloses that a mark positioning signal generator 110 generates signals for determining the positions of marks on the sample images (column 4, lines 27-30). In particular, the generator 110 compares an output waveform of a scanning signal generator 109 with a reference signal 11 and generates, when both coincide, signals indicative of the positions of the marks, i.e., the mark positioning signals (column 4, lines 30-35). These signals and a video signal are composed by signal composing circuits 113 and 114, and the marks indicating the positions are added to the image (column 4, lines 35-38).

In contrast to claim 1, Kato et al. fails to disclose or suggest a rectifying parameter acquiring means for acquiring rectifying parameters at relative tilt angles between the specimen holder and the incident electron beam, and lens distortion correcting parameters for correcting the lens distortion of the electron optical system. In fact, there is nothing at all in Kato et al. that discloses or suggests anything about lens distortion. Accordingly, claim 1 is patentably distinguishable from Kato et al. Claims 2-5 and 7 are also patentably distinguishable from Kato et al. by virtue of their dependence from claim 1, as well as their additional recitations.

Independent claims 8, 10, 12 and 18 are patentably distinguishable from Kato et al. for reasons analogous to claim 1. Claims 9 and 13-15 are patentably distinguishable from Kato et al. by virtue of their dependence from claims 8 and 12, respectively, as well as their additional recitations.

Lastly, claims 6, 11, 16, 17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kato et al. Claims 6 and 16-17 are patentably distinguishable from Kato et al. by virtue of their dependence from claims 1 and 12, respectively, as well as their additional recitations. Claim 11 is patentably distinguishable from Kato et al. for at least the same reasons as claim 1.

Claim 19 recites a method of measuring a specimen in three dimensions comprising, *inter alia*, detecting first and second detection data related to the reference template under

conditions of first and second relative tilt angles between the specimen holder and the incident electron beam, and acquiring, using the reference marks, rectifying parameters for correcting the differences in distortion and in scale, due to differences in the first and second relative tilt angles and contained in the first and second detection data. Claim 19 further recites, *inter alia*, detecting first and second detection data related to the specimen under conditions of first and second relative tilt angles between the specimen holder and the incident electron beam, and measuring the shape of the specimen in three dimensions in the state of the differences, in distortion and scale due to differences in the first and second relative tilt angles, as corrected by the rectifying parameters.

In the rejection, the Office Action asserted that it is well known to use reference templates to generate reference positions, and that it would have been obvious to use the reference template because it would allow for efficient operation. Applicants respectfully disagree with the Office Action's assertions. There is nothing in Kato et al. that discloses or suggests such a use is well known or that such use would allow for efficient operation. Nor has the Office Action cited any other reference for such a proposition. In the absence of any reference providing disclosure that supports this proposition, the Office Action has failed to make a prima facie case of obviousness and the rejection of claim 19 as being obvious in view of Kato et al. must be withdrawn (see MPEP § 2144.03).

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of

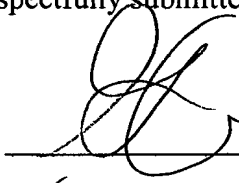
papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R.
§1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

9/25/04

By

 34371

FOLEY & LARDNER LLP

Customer Number: 22428

Telephone: (202) 672-5414

Facsimile: (202) 672-5399

Richard L. Schwaab
Attorney for Applicant
Registration No. 25,479